

C.
C 333 KD

FEB 2¹ 1918

Series VII. NOVEMBER, 1911. Nos. 1 and 2.

MAR 1 9 1917

**BULLETIN OF
CENTRAL COLLEGE
FAYETTE, MISSOURI**



BENEFACTORS' DAY ADDRESS

The Discovery of the Philosopher's Stone

By REV. JAMES W. LEE, D. D.,

**Pastor of St. John's Methodist Episcopal Church, South,
St. Louis.**

The Bulletin of Central College is published quarterly by the College. Entered at Fayette, Missouri, as second-class mail matter.

UNIVERSITY OF ILLINOIS LIBRARY

C
C333 K2

MAR 19 1917

Bulletin of Central College

SERIES VII.

FAYETTE, MO., NOVEMBER, 1911

Nos. 1 and 2.

The Discovery of the Philosopher's Stone.

By Rev. James W. Lee, D. D.

President Webb, in connection with the invitation he sent me to deliver the Benefactors' Day address, intimated that I could select my own subject.

I can hardly think of any subject having to do with literary, philosophical, scientific, or political questions but would furnish ample material for an address appropriate to the spirit which led to the establishment of Benefactors' Day in Central College. Those noble men, who, by their gifts, have made Central College possible, had in view the training of students in all lines of study, so that if I were to give an address on architecture, or painting, or music, or agriculture, or theology, or literature, it would be perfectly in keeping with the occasion, which calls us together tonight. I have chosen as the subject of my address, "The Discovery of the Philosopher's Stone."

The most remarkable achievement in the history of human research was the discovery of the Philosopher's Stone in 1898. This event is brilliant enough to make luminous forever the period in which we live. When the French soldiers in 1798 dug the Rosetta Stone from the mud of the Nile, they put the key to Egyptian learning in the hands of scholars and unconsciously did the only thing that justified the invasion of the country by Napoleon. But the history of an an-

21 Feb. 18 Sweet J.

cient people learned men are able to read out of the hieroglyphics by means of the Rosetta Stone is as a spark to the sun in comparison to the history of Creation students of science are able to read out of the universe by means of the discovery of the Philosopher's Stone.

I.

Ever since man began to think he has had a conviction that all things were made by some one thing. Nights have never been still enough and sleep has never been profound enough to shut the human mind from the dream that the strands from which the universal order are braided were drawn from the same kind of yarn. Thales thought the worlds were spun out of water. Diogenes, of Apollonia, believed they were twisted out of air. Heraclitus said the raw material of immensity was fire. Plato held that the embroidery of Creation was crocheted out of ideas. The quest of the Greeks was for some single principle by which they could account for the reality of being. They sought the "by word" that would open the door to them into the free-masonry of existence. They looked for the substance out of which all things came and back into which they could all be turned again. Had they defined to themselves the Philosopher's Stone, they would have represented it as standing for the answer to the riddle of reality.

The Egyptians, unlike the Greeks, were a practical and not a speculative people. They preferred corn to feed their bodies on to first principles to feed their minds on. In their esteem the earth was a granary and not a library, a packing house and not a college, a dining room to eat in and not a study to think in. They preferred luxury to logic, as the savage in Africa today longs for fresh meat to match his hunger far more than for the reticulations of mental wheelwork to match his wonder. It was their custom to suck the juice direct from the orange of existence instead of finding reasons for its shape and color and content. It

was in accordance with their ideas to drink down straight the sugar from the watermelon of life rather than to try to find out how it grew green and round on the vine. Hence, they narrowed the meaning of the Philosopher's Stone to the dimensions of a fact that could be cashed in the coin of the realm. They saw no use for a theory that could not, as a servant, be made to accomplish practical results. They believed certain elements were lying around loose in Nature, from which, if found, they could distill a concoction that would turn base metals into noble ones. They never succeeded in transmuting one metal into another, but the contagion of their efforts to find the secret of doing it spread to the different nations of Europe. From the fourth Century A. D. down to the death of Balsamo in 1795 many of the most distinguished men in history spent their time and thought and money in the effort to find the Philosopher's Stone. Belief in the Philosopher's Stone constituted the creed of great church fathers, like Thomas Aquinas; philosophers, like Albertus Magnus; students of Nature, like Roger Bacon; and pantheistic mystics, like Jacob Bohmen. Accomplished fakers, like Nicholas Flamel, Marechal de Rays, Count St. Germain and Count Cagliostro, taking advantage of the credulity of the people, made vast fortunes by the sale of complicated mixtures they declared would turn lead into gold.

Faith in the Philosopher's Stone declined with the gradual development of the Science of Chemistry. After the publication of John Dalton's New System of Chemical Philosophy in 1808, the last foot of ground left for the alchemists to stand on seemed to be destroyed. According to the doctrine of Democritus and Lucretius atoms were the foundation stones of the heavens and the earth. Earth and air and fire and water could all be divided and subdivided on and on and down and down to finer and finer points, but at length the limit was reached, and the final, ultimate end of every material thing was the atom. Beyond the atom there was

nothing. Having the accumulated results of patient study for more than two thousand years to assist him, Dalton was able to lay for the atom a firmer and broader foundation than ever Democritus and Lucretius were able to do. After Dalton's genius had disclosed the place and importance of the atom, the world of the alchemists was thought to be an uncharted wilderness lying outside the track of progress. From 1808 down to the beginning of the last quarter of the nineteenth century, more and more was made of the atom. Meteors, moons and vast planets, whirling in space, were all made up of tiny, little, impenetrable, unbreakable bits, called atoms. Blazing suns and ponderous worlds hurtling through space on billion-mile journeys were all made of atoms. A million-billion of these dumb infinitesimal balls are contained in a speck of matter big enough to see with the naked eye. If one's power of vision were increased a million billion times, he would be able to see the atoms rebounding, flying and colliding around him like so many bullets. The trillions of quadrillions of quintillions of atoms contained in the water sufficient to fill the boiler of a steam engine can be inflamed and scourged by heat until they become mad enough to draw a freight train over the Rocky Mountains.

II.

Thinking of atoms as impenetrable and final and as endowed with such wonderful gifts of doing things, the opinion became fixed among many of the leading scientific men in the seventies of the last century that there was no place for intelligent will in the universe. The atoms themselves were regarded by many as having sense. Haeckel said they had sensation and will. Clifford declared them to be mind-stuff. Tyndall said they manifested desire for union. Thus the conclusion was reached that the universe was a machine with capacity inhering in its wheels to turn itself. The materialistic tide, beginning in Greece with Empedocles, Leucippus, Democritus, and Epicurus, and flowing

steadily over Rome from the time of Lucretius, had at length reached its tide with Dalton and Tyndall and now threatened to flood all the shores of the modern mind.

Thinking of the atoms as having free-will as Lucretius did, or as having sensation and will as Haeckel did, or as being so much mind-stuff as Clifford did, the materialists were able to see how all worlds were spun by them as if they were so many little spiders, out of their entrails, and then left round, opaque, wheeling webs in the heavens.

III.

It is not difficult to understand why those who believed the universe to be a machine, the wheels of which were self-whirling atoms, had no place for creative mind. If the atoms, of which all things were built, were little bricks of matter self-fashioned to points so fine that they could be cut no further, and had the necessary self-activity for laying themselves up in the walls of the heavens, and for wheeling themselves into the gable ends and rafters and roofs of the constellations, what was the use of a God sitting idly by to watch them work? What use was there for an overseer on the plantation, if the hands worked as well and accomplished as much without his presence as with it? There seemed to be no reason for bringing the Eternal Mind from some transcendental whither to do work in a system equipped for doing everything that could be done without it. They saw no way to bridge the chasm between things and thought, between mind and matter. Even if the universe of the tangible needed any outside assistance, there was no nook nor cranny through which a God could get into the mechanical order. Every crevice and roadway was closed against him. All the gates were shut tight against any divine invasion of the territory bounded by time and space.

IV.

This was the situation as looked at from the standpoint of the scientists forty years ago.

A few years later Sir William Crookes, while examining the actions of particles of matter in a bulb from which the air had been taken, saw that they had properties not possessed by ordinary matter. He concluded that he had actually touched the borderland where matter and force merged into one another, the shadowy realm between the known and the unknown. In 1895 Roentgen discovered the X-rays, while experimenting further with vacuum tubes. In 1896 Henri Becquerel discovered that the salts of uranium had the power of spontaneously emitting invisible radiations, which affect photographic paper, and pass through metals and discharge electrified bodies. Thus strange discoveries were being made by looking into regions never penetrated before. The frontiers of new lands were being entered and marvelous were the tales brought back by the daring explorers.

V.

In 1898 Madame Curie and her husband, after infinite pains, succeeded in discovering radium. This event stirred the world of science far more deeply than the declaration of Professor Tyndall in his Belfast address in 1874 moved the world of faith. Democritus and Lucretius and Dalton and Tyndall and all the other believers in the hard, impenetrable, unbreakable atom were put out of business in a single day. Theories of philosophy hoary with age, as well as newest systems built on them toppled with sudden and world-resounding crash into ruins. The very foundations of Creation itself seemed to be upset. The discovery of radium meant so much that it will take the slow, poky minds of the rank and file of men a hundred years to understand all that was involved in it. One of the most amazing things about it was that the dreams of the alchemists were found to be true, more than a century after the last one of them was dead. The Philosopher's Stone was a vast, revolutionizing fact after all, and had at last been brought out of darkness into light, had been brought from the realm of fancy into fact. The

quest of the ages since the days of old Thales had been found. Thomas Aquinas and Albertus Magnus and Roger Bacon, who had died believing in the transmutability of the metals, were vindicated. When radium was discovered, a form of matter was found the atoms of which were in the act of breaking down. Never before had the inside of atoms been seen. They had kept their little souls locked out of sight since the foundations of the world were laid. It was seen that the atoms in a small speck of radium had force enough packed away in their little insides to keep a bell ringing for hundreds of years, or to keep a globe of light blazing for hundreds of years. It was found that the vastest stores of energy were not in the coal beds, but inside the atoms of which the coal beds were formed. And while a million billion of atoms are necessary to make up a speck of matter large enough to be seen with the naked eye, yet each atom of this million billion of them has inside itself from one thousand to more than two hundred thousand electrons, or corpuscles, or bits of electricity, making revolutions at a high rate of speed as the planets are turning round the sun in the heavens. It was learned not only that the electrical corpuscles are wheeling on circles inside each atom, but the key was also found for determining precisely how many corpuscles each atom contained. Hydrogen being the lightest of all the elements, its atom contains just one thousand more electrons than its atomic weight. Its weight being one, its interior self houses one thousand electrons. The atomic weight of gold is 197, therefore, each gold atom contains within itself 197,000 electrons. Lead with 206 for its atomic weight contains atoms filled with 206,000 corpuscles each. Find the atomic weight of any of the eighty chemical elements, and multiply that number by 1000 and you have the number of corpuscles contained in each one of its atoms.

VI.

It was learned that though the number of corpuscles in each atom was different, yet the corpuscles

themselves were all precisely alike. For instance, there are 206,000 corpuscles in each atom of lead, and there are 197,000 corpuscles in each atom of gold, but the corpuscles in an atom of lead are exactly like those in an atom of gold. Thus, in order to turn lead into gold, it would only be necessary to take 9,000 corpuscles out of one of its atoms and a gold atom would be the result. Iron has 55,000 corpuscles in each one of its atoms, and silver has 107,000 corpuscles in each one of its atoms. If you will take out of an atom of silver 52,000 electrons, you will have left an atom of iron, or if you will add 52,000 electrons taken from some other element to the corpuscles of your iron atom, you will get silver. Sir J. J. Thompson says that man will know some day doubtless as well how to get hold of the electrons and mix them to make what he wants, as he knows today how to combine hydrogen and oxygen to get water.

VII.

All this is amazing enough to take people's breath away, but something more astounding still has been found out about corpuscles, and that is their vast energy. Sir Oliver Lodge says it has been calculated that the collapsing of the corpuscles, or electrical constituents of a radium atom, by so little as one per cent of their distance apart can supply the whole of the energy of its observed radiation for something like thirty thousand years. The corpuscle is so small that in comparison with the size of the atom in which it revolves it is as a grain of sand to a cathedral. And yet these little corpuscles, when by any means they get outside the atom of which they form a part, shoot forth with a velocity that, according to LeBon, could be equalled by a bullet only if it had one million three hundred and forty thousand barrels of gunpowder behind it. Corpuscles travel so fast in their small orbits inside the atom, that the same rate of speed in a straight line would take them from the earth to the moon in four seconds. There is force enough inside an old-fashioned

copper cent piece, if it could be released, to pull a large freight train four times and a quarter the circumference of the earth. Sir Oliver Lodge says that the electrons are as much faster than a cannon ball as a cannon ball is faster than a snail. Sir J. J. Thompson says that a few grains weight of hydrogen has within its corpuscles enough force to raise a million tons to a height of more than three hundred feet. Max Abraham calculates that one gramme's weight of corpuscles contains energy equal to eighty billion horse power per second.

Sir J. J. Thompson said in his presidential address before the British Association held in Winnipeg, Canada, in 1909, that in one gramme of hydrogen, that is, in one-thirtieth of an ounce of hydrogen there are about 6×10^{23} (raised to the 23rd degree) atoms, and that the energy due to the corpuscles in a gramme of hydrogen is equal to 11×10^9 (raised to the 9th degree) calories, or heat measures.

VIII.

I have pointed out before that the atoms of hydrogen and oxygen combined in water sufficient to fill the boiler of an engine could be scourged by heat into anger sufficient to impel them to draw a freight train over the Rocky Mountains. But the force developed by scourging the atoms of oxygen and hydrogen from the outside of themselves is not a millionth part of the force that could be secured from the inside of them. There is, perhaps, enough force inside the atoms of an engine boiler full of water to take a train from here to San Francisco and back one hundred thousand times. This can be understood when we remember that the corpuscles inside the atoms are revolving in their orbits at an unthinkable rate of speed per second. Their great energy is due to the fact that they are moving so fast.

IX.

The conclusion students have reached, then, is that matter is constituted of electricity, and that electricity

is nothing but brilliant mist rising up from the ether sea. Ether has been defined as the nominative case of the verb to undulate. Sir Oliver Lodge says that the intrinsic energy of the constitution of the ether is so incredibly, so portentously great that every cubic millimeter of space possesses what, if it were matter, would be a mass of a thousand tons and would contain energy equivalent to the output of a million horse power station for forty million years. We can understand therefore, why the corpuscles, which are flying around with such velocity inside the atoms, have such tremendous power. The pressure of the ether is so great that it equals 10,000 tons per square millimeter. Matter, therefore, is nothing but areas of the diminished density of ether. When the ether moves out into gossamer, filmy, imperceptible mist, we call it matter. Matter then is made of atoms, and atoms are made of corpuscles, or points of electricity, and electricity is made of ether, and ether is coterminous with the whole sum of things. Ether is force, but imponderable and immaterial. It is as subtle and as distant from what we know as ordinary matter as thought is. Ether is the everlasting dwelling place of eternal intelligence. It constitutes the vehicle through which the Creator works. God is not imprisoned in it. He transcends it. But He uses it as the raw material out of which to make worlds.

Thus, when we resolve matter into ether, we are compelled to admit that not a wave of it can ever move out into any created thing without the thought and will of the Almighty.

Everyone can see that the action of a force can not be determined by a force, and that motion can not be determined by motion. That the action of a force can not be determined by a force is demonstrable. For, if the action of a force is determined by an act, then the act itself must have been determined by a preceding act, and this preceding act by another, and so on in like manner to infinity. If the front one of a thousand billiard balls in a row is seen to move, we are

compelled to infer that it was propelled by some power other than and outside itself. When we are taught by science, therefore, that all matter is made of force, we are driven to the conclusion that the force taking the various forms of matter is the expression of the eternal will of the Creator. So at last we see that Plato was right when he taught that all things we see are but ideas clothing themselves in the forms of matter.

X.

The Philosopher's Stone with Thales was water; the Philosopher's Stone with Democritus and Dalton was atoms; the Philosopher's Stone with the modern scientists is electricity, and then, when further analyzed, is ether, and ether has now been shown to be force, and finally, back of force is thought, and thought is the expression of the eternal mind of God. The Philosopher's Stone, then, as far as so-called material things go, is thought. All things are the expression of thought. Thought is the foundation principle of the created universe. Thought is the Philosopher's Stone in the universe of things. It is amazing that science brings us back to idealism as the working principle of the sum of things. What we call matter, then, is not matter in the ordinary acceptation of the term; it is thought in the form of whirling, seething bits from the sea of ether. It is thought in the form of ether. We call things hard. There is nothing hard. Rocks are soft, and seem to be rigid because made up of particles going fast. A hard thing is a soft thing going fast. The hard, fixed appearance of the mountains and the earth are simply a case of cinematographic continuity like the scenery in a five cent picture show. The carriage seems to be coming down the road and the robbers seem to be holding the parties in it up, but instead of there being one scene, there are thousands of them thrown together in a single picture. So, instead of seeing the Shasta Mountains as you pass from Portland to San Francisco as solid, stolid, hard piles rising into the sky, you see a cinematographic aggregation of billions of quadrillions of sextillions of atoms, multi-

plied over and over again and again by as many trillions of atoms each filled with thousands of corpuscles and all together going so fast that they make a huge heap that seems to be hard and single.

Halley's Comet is nothing but a cinematographic picture show, making a seven billion mile tour every seventy-five years, giving free exhibitions to planets like the Earth and Mars and Uranus and Neptune.

XI.

We hear a great deal today about what is called New Thought and it is remarkable what great things can be accomplished by exercising the intelligence in the direction of God's thought. Many diseases can be cured simply by getting in line with the ideas expressed in the Universe by the Infinite Mind. But we can not, by thinking, arrest the habits of the universe. Many ailments can be healed by thinking in the direction of the laws of God. We hear it often said today that there is no such thing as matter, and it is correct that there is no such thing as matter as the ordinary mortal thinks about it. But there is such a thing as the definite combination of atoms into bodies, which, in the last analysis, are corpuscles, and finally, and ultimately, ether. Now the thoughts of the Eternal Mind, which express themselves in oxygen, gold, platinum, arsenic, etc., are filled with dynamite. They can not be trifled with. They were expressed along definite lines and intended to accomplish definite results.

XII.

The human body, for instance, is made up of oxygen, hydrogen, nitrogen, carbon, with a little mixture of iron, lime, soda and phosphorus, besides traces of compounds known as chondrin, osmazome, cholesterin and resin. In each oxygen atom in the human body there are 16,000 corpuscles, in each hydrogen atom there are 1,000 corpuscles, in the carbon atom 12,000 corpuscles, in the nitrogen atom 14,000 corpuscles, in the iron 55,000 corpuscles, in the phosphorus atom 31,000 corpuscles, etc. All these corpuscles are points of electricity.

XIII.

Man's body is so much palpitating lightning. In man we have so much of the Aurora Borealis breathing. Now, to get health and peace and strength out of lightning and Aurora Borealis, there must be the most exact conformity to the laws of the marvelous mixture of molecules out of which man's body is built. There is not such a combination of forces under the sun as is found in the body of man. Now, it is an absolute law that nothing can be taken into the body without danger except something that has its duplicate already in the body. You can get strength from milk and eggs and meat and bread and fruit and vegetables, because the oxygen, hydrogen, nitrogen, carbon, iron, lime, soda, phosphorus, chondrin, osmazome, cholesterin and resin which constitute the body of man are found in milk and eggs and meat and bread and vegetables. The corpuscles in these forms of food match the corpuscles of which man's body is made. But arsenic is an element with 75,000 corpuscles in each one of its atoms. If one should undertake to put a bottle of arsenic into his body, he would find that there being nothing in the body to match the arsenic, the attempt of the body to arrest the effect of the arsenic would result in his death. Man can not, by thinking, arrest the effect of an element taken into his system for which his body has no affinity and no need. God made arsenic by taking 75,000 corpuscles and putting them together. So arsenic is His thought, and if man could arrest its effect in the system by a thought of his, then it would follow that a thought of the Infinite could be held up by a thought of the finite. Every form of matter, as a thought of God, acts in accordance with the most exact law. The laws of God really constitute the love of God, and love is as deadly as dynamite when you get into wrong relations with it. All the quadrillions of atoms have each their own role and play it in exactly the same fashion. The laws of the Universe may be regarded as the summing up of the promises of God. It is the promise of God in the law of gravitation that if

you keep your feet on the ground, you will be maintained in peace, but it is also the promise of God in the law of gravitation that if you climb to the top of a church steeple with the vain hope that God being good will take care of you and thus presuming on His love, jump to the ground, it will follow that you will be killed, nevertheless. It is a promise of God in combustion that, if you jump into a furnace, you will be burnt. When an illiterate, hysterical champion of New Thought, with no knowledge of the promises of God in the laws of the Universe, with no mental training as to the meaning of God's thought expressed in Nature, rises up to tell us that evil and disease can be blotted from the life of humanity in any other manner than by conforming to God's law, he should not be taken seriously. Such a man would not do the slightest harm to people trained to think, but there are many poor, ignorant, mentally-belated specimens of humanity in the world and these would be in danger of ruin if they should undertake to put into practice such crude thinking. Things have certain properties in themselves and our thoughts can not take them away. Pain and disease are realities just as fire is a reality. The conception of life that leads one to think that fire will not burn is really a lapse into the incoherent, inconsequent and capricious idea of Nature held by the primitive mind of the savage. To say that microbes, when they begin to bite and eat away the health of a man, are not real things, is like saying that the tiger, ready to devour the hunter is not a real, striped thing. A tubercle bacillus inside one's lungs is as real as a rattle snake outside one's leg. The negroes down South bought comet pills from fakers in 1910 to insure themselves against the perils they feared were ablaze in the streamers of Halley's Comet. But no one trained to think could ever believe that pills of any sort would have the slightest effect in saving people from whatever perils there might be in Halley's Comet, or in the San Francisco earthquake, or in the Johnstown flood.

XIV.

The Philosopher's Stone, then, in the realm of things is the thought of God. The Philosopher's Stone in the realm of spirit is the love of God. God is Infinite Spirit, man is finite spirit. God, as Spirit, is defined in the Scripture as love, and man, as spirit, when he lives up to what he essentially and potentially is, is love. When man loves God with all his heart and mind and soul and strength, he conforms to the laws of his own being and to the divinely-implanted potential power to lead a holy life. When man by the grace of God in Jesus Christ loves, he is himself, really, essentially and fundamentally. Love is the raw material of man's being. In loving, he becomes himself as a child of God, himself as an expression in human form of the love of God. All material things are expressions of thought, clothing itself in the forms of ether. All self-conscious beings are expressions of love, clothed in forms of humanity. In coming back to ether, planets, rocks, mountains, seas and forests come back home, come back to the origin of themselves, come back to that out of which they were made. So man, in coming back to love, comes to the home of himself, the origin of himself, the reality of himself, the raw material of himself. Take the ether in a cubic inch of space and it can be used for making any material thing in the Universe. It can be used to make diamonds, or rocks, or water, or soup, or cloth, or rice, or mountains, or stars, or trace-chains, or anything whatsoever that has length and breadth and height. And so love, real, disinterested, pure and true in any human heart can be cashed in any form of human value. In loving, one possesses all things. The fountain and reality of love was Jesus Christ. He declared, if a man find himself, he shall lose himself, that is, if he find himself in things, he shall lose himself in spirit. But if he lose himself in love, he finds himself in spirit.

In society we have the divinely-implanted relations of men served up in terms of life. As the mineral climbs upward to bloom in the flower, and as earth and

sunbeams get together to grow in the oak, so at last electricity and life conjoin to smile in the face of man. In partnership with him the electrons stand up, corpuscles walk about, atoms sit at the table, molecules breathe and the whole marvelous mixture is agitated by the beating pulse. Man is a representative and trustee of all below him and succeeds in compressing the wonders of the whole universe into the small compass of one hundred and fifty exquisite pounds of animated electricity. In man the raw material of life finds a head and a heart, a tongue of utterance and a face of beauty. In the blood which flows through his heart he carries in solution hills and streams, winds and clouds, flowers and birds and continents and seas, and something of the content of the whole ether sea.

But until through love man comes into relation with others of his kind, he has no significance. In the race to which he belongs he finds his other and better self. When through love he comes into reciprocal relations with the larger and kindred life of which he forms a part, his arms become long enough to encircle the globe. In correspondence through love with the social whole in which his life is planted, he finds it possible to multiply the significance of his own individuality by the social whole of the race. Through relation, in terms of love, to all the sons and daughters of God, he becomes significant and great, for upon the supposition that there are one billion five hundred millions of persons like himself on earth, he finds his individuality augmented by the possession of three billion hands to help him work, and of three billion eyes to help him see, and one billion five hundred millions of hearts to aid him in solving the problems and bearing the burdens of life. When he comes into relations with men and God through terms of love, his existence is not then eked out in lone Bedouin isolation. He becomes a partner of a life as wide as humanity and as illimitable as God, the throbbing currents of which come up around his beating heart to refresh it and to float its outgoing pulsations throughout the universe.

The race from the beginning of its career has been painfully and slowly, but surely, by means of love, pulling itself together into one great, harmonious, sympathetic, human whole. It is the unspeakable privilege of those of us, who live at the beginning of the twentieth century, to see this work more advanced than ever before. Humanity is united today as it never was before, because human beings have learned the secret and the wisdom and the practical results of loving one another as they never did before. The elbows of the nations now touch and they are supported by a common commerce, and more or less inspired by a common hope, and feel themselves moved to a common destiny as not in any previous period of the world's history. By loving, man finds the secret of living a universal life, and sees himself as an open port, where, for a small contribution to the multiplex flow of exchanges passing through it, he can take toll of the merchandise of the world.

It is because society is being organized in accordance with the principles of love that man finds it possible to use the millions invested in street car systems for 5 cents a ride. And because society has learned to substitute the law of love for the law of the jungle, man finds it possible to avail himself of the vast outlay of money and thought which unite to produce the morning paper for 1 cent a copy. And because of this, he can use all the billions which have been spent in the establishment of railroads, steamship lines, electric light plants, shoe factories, iron foundries and other forms of modern industry to serve every side and relation of his life at such compensation as comes within the range of every earnest toiler's income. No king or queen of ancient times ever had the comforts and conveniences enjoyed by every industrious laboring man of today. No Lucullus or Heliogabalus ever fared as he does, and all because we have come to the time when man, by learning the secret of love, is able to recognize himself as one factor of an equation of which the human race is the other, and to the time

when the small factor, which spells individuality, has learned how to increase its power and multiply its efficiency by the multitudinous immensity of the larger factor, which spells humanity.

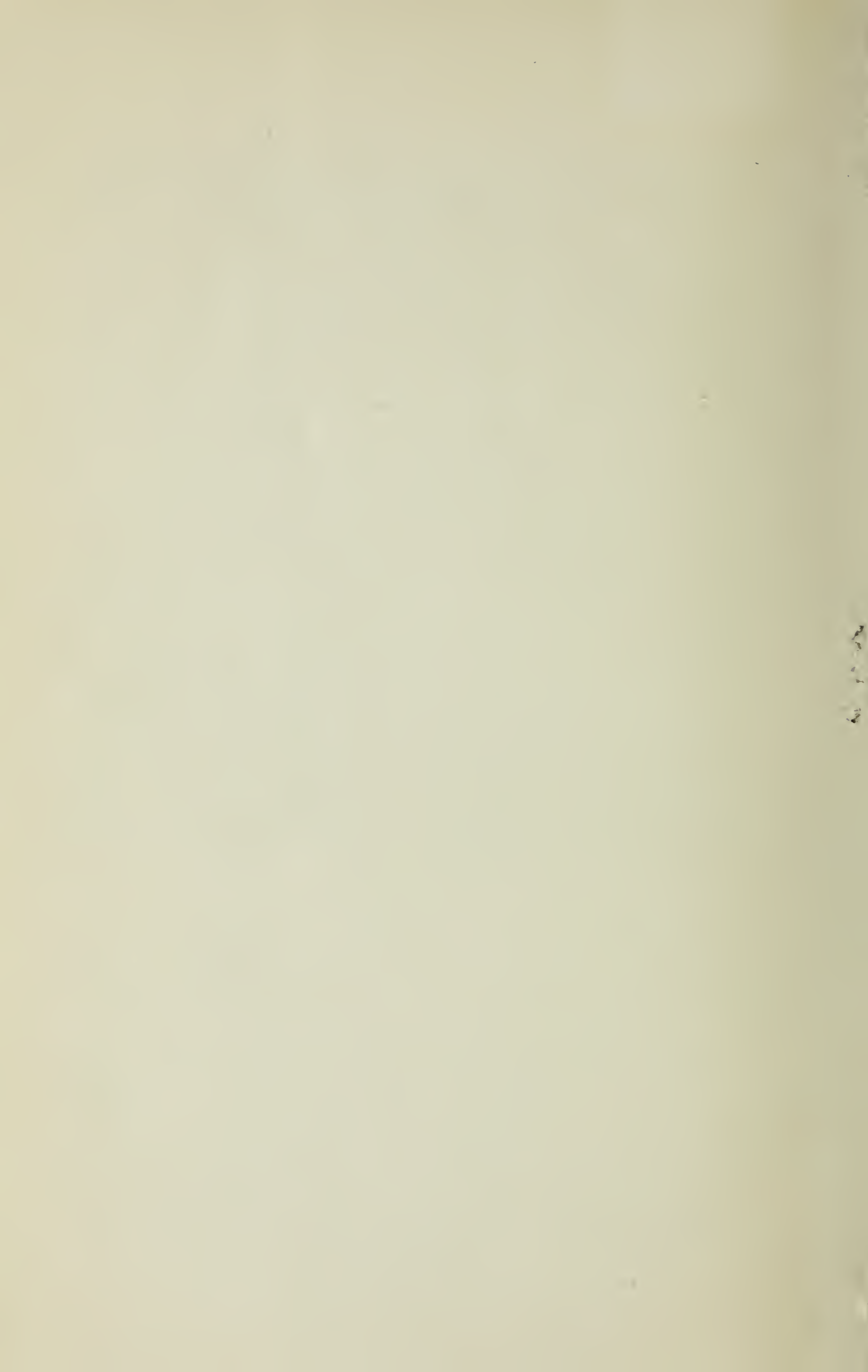
In his recent address before the British Association, held in Portsmouth in August, 1911, Sir William Ramsey, the president, declared that the commonwealth of Athens attained a high-water mark in literature and thought, which has never quite been passed. The reason he gave for this was that a large proportion of its people had ample leisure due to ample means. They had time to think and time to discuss what they thought, and they achieved this because each Greek freeman had, on an average, at least five slaves, who did his bidding, who worked his mines, looked after his farms, and, in short, saved him from manual labor.

Now, we in the United States are much better off. The population of the country is, say, in round numbers, ninety millions. There are consumed in our factories one hundred million tons of coal annually, and Sir William Ramsey said it is generally agreed that the consumption of coal per indicated horse-power per hour is, on an average, about five pounds. This would give us, as a nation, fourteen million horse-power per year. A single horse-power is twenty-five times as much as a single man-power. Fourteen million horse-power are, therefore, three hundred and fifty million man-power. Taking a family as consisting, on the average, of five persons, our ninety millions would represent eighteen million families, and dividing the total man-power by the number of families, we can see that each American family has, on the average, nearly twenty slaves doing its bidding, instead of the five slaves owned by the Athenian family.

It is this that makes it possible for America to support its own population, while contributing a large amount to the support of the populations of the rest of the globe. When I was a boy down South, a man was thought to be of importance if he owned

twenty negroes. We have lived to see the time in our country when every American family has twenty slaves, not in the form of human flesh, but in the form of physical force to work for it.

It has taken man thousands of years to find the Philosopher's Stone in things. For the future his energy will be directed to the recognition of and the practice of love, which is the Philosopher's Stone in the realm of humanity. The discovery of this is not new, but the attempt to practically apply it to human affairs in this world is new. Up to within recent years the general working theory has been that love is a good thing for heaven, but an impractical thing in the hard, work-a-day world this side the grave. But we have arrived at such a crisis in our relations and struggles that human beings of insight and leading are beginning to feel that the only way out of our entanglements, national, international, political, social, and commercial, is by the divinely-ordained highway of love. Preachers from Job to Phillips Brooks have been saying this all along, but the heedless world rushed headlong, practicing the principles of the jungle in the domain of human affairs. They felt the preachers were right in a transcendental sense. Just now they are beginning to see that the preachers are right in every sense for this world and all worlds.





3 0112 105736554